

Title (en)
HIGH STEREOSPECIFIC POLYBUTYLENE POLYMER AND HIGHLY ACTIVE PROCESS FOR PREPARATION THEREOF

Title (de)
HOCHSTEREOSPEZIFISCHES POLYBUTYLENPOLYMER UND HOCHAKTIVES VERFAHREN ZU DESSEN HERSTELLUNG

Title (fr)
POLYMERES DE POLYBUTYLENE A STEREOSPECIFICITE ELEVEE ET PROCEDE DE PREPARATION DE CELUI-CI A HAUT RENDEMENT

Publication
EP 1664133 A1 20060607 (EN)

Application
EP 04724903 A 20040331

Priority

- KR 2004000755 W 20040331
- KR 20030060635 A 20030830

Abstract (en)
[origin: US7345122B2] Disclosed is a process for the preparation of a high stereospecific (isotactic) polybutylene polymer comprising the step of polymerizing a reactive monomer, 1-butene, which is used or is not used as a solvent, in the presence of catalyst and inert gas. According to the present invention, it is possible to prepare a high stereospecific polybutylene polymer in much higher activity than that of any other known processes for the preparation of a high stereospecific polybutylene polymer. The high stereospecific polybutylene polymer according to the present invention is a homopolymer of 1-butene, or a copolymer containing α -olefin and up to 40% by weight of a comonomer, wherein titanium in the catalyst residues is not detected in the ppm level, stereospecificity (Isotactic Index, mmmm %) determined by ^{13}C -NMR is 96 or more, molecular weight distribution (Mw/Mn) is 3-6, and molecular weight distribution (Mw/Mn) can be controlled to 8 or more.

IPC 1-7
C08F 10/08; **C08F 2/00**; **C08F 4/00**

IPC 8 full level
C08F 10/08 (2006.01); **C08F 2/00** (2006.01); **C08F 10/00** (2006.01); **C08F 110/08** (2006.01)

CPC (source: EP KR US)
C08F 10/00 (2013.01 - EP US); **C08F 10/08** (2013.01 - KR); **C08F 110/08** (2013.01 - EP US); **Y10S 526/905** (2013.01 - EP US)

C-Set (source: EP US)

1. **C08F 10/00** + **C08F 4/6565**
2. **C08F 10/00** + **C08F 4/651**
3. **C08F 110/08** + **C08F 2500/15** + **C08F 2500/03** + **C08F 2500/04** + **C08F 2500/12** + **C08F 2500/08**
4. **C08F 110/08** + **C08F 2500/15** + **C08F 2500/03** + **C08F 2500/04** + **C08F 2500/12**

Designated contracting state (EPC)
AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HU IE IT LI LU MC NL PL PT RO SE SI SK TR

DOCDB simple family (publication)
WO 2005021611 A1 20050310; AT E431836 T1 20090615; AU 2004268892 A1 20050310; AU 2004268892 B2 20100218; BR PI0413395 A 20070221; CN 100339400 C 20070926; CN 1590417 A 20050309; DE 602004021191 D1 20090702; EP 1664133 A1 20060607; EP 1664133 A4 20070314; EP 1664133 B1 20090520; ES 2327410 T3 20091029; JP 2007504293 A 20070301; KR 100472771 B1 20050314; RU 2006109911 A 20071010; RU 2318832 C2 20080310; US 2007015862 A1 20070118; US 7345122 B2 20080318

DOCDB simple family (application)
KR 2004000755 W 20040331; AT 04724903 T 20040331; AU 2004268892 A 20040331; BR PI0413395 A 20040331; CN 200410042337 A 20040520; DE 602004021191 T 20040331; EP 04724903 A 20040331; ES 04724903 T 20040331; JP 2006524559 A 20040331; KR 20030060635 A 20030830; RU 2006109911 A 20040331; US 56941106 A 20060223